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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 25

Application Number: 09/520,419
Filing Date: March 08, 2000
Appellant(s): MEEK ET AL.

Ryan C. Barker
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12 January 2004.

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(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct. It is noted that claims 1, 8-10, and 22 were rejected under 35 USC 102(b).

The Examiner respectfully submits that these claims should have been rejected under 35 USC 102(e). However, the Examiner respectfully submits that changing the grounds of rejection does not change the substantive issues in this case with regards to the rejection of claims 1, 8-10, and 22.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection (paper number 23) contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

It is noted that claims 1, 8-10, and 22 were rejected under 35 USC 102(b). The Examiner respectfully submits that these claims should have been rejected under 35 USC 102(e). However, the Examiner respectfully submits that the substantive issues in this case with regards to the rejection of claims 1, 8-10, and 22 have not been changed, and the underlying rationale for the rejection remains the same.

(7) Grouping of Claims

The rejection of claims 1-4, 6-10, and 22 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,486,999	MEBANE	1-1996
5,976,082	WONG et al.	11-1999
6,269,339	SILVER	7-2001

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(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 8-10, and 22 are rejected under 35 U.S.C. 102(e). This rejection is set forth in a prior Advisory Action, Paper No. 19, and reproduced hereinbelow. Claims 2-3, 4, and 7 are rejected under 35 U.S.C. 103(a). These rejections are set forth in a prior Advisory Action, Paper No. 19, and reproduced hereinbelow. The rejections which appear below substantially repeat the rejections made in the previous Office Action (Paper No. 19).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 8-10, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Wong et al. (5,976,082).

(A) As per claim 1, Wong discloses a method of identifying patients at high risk of adverse health outcomes (col. 1 lines 9-12, col. 2 lines 31-45, col. 3 lines 42-48, col. 5 lines 13-25 and 31-40, and col. 15 lines 58-67) comprising:

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(a) receiving (reads on "collecting"), storing, and extracting information from a patient record (reads on "individual") for a predetermined set of criteria or predictors (Fig. 1A-1B and 4, Abstract lines 1-24, col. 2 lines 49-61, col. 3 lines 58-67, col. 4 lines 24-34, col. 5 line 66 to col. 6 line 16, col. 6 lines 44-51, col. 7 lines 12-21, and col. 17 line 49 to col. 18 line 4);

(b) assigning, based upon information from a patient record, a separate value to each predictor of the set of predetermined criteria or predictors (Abstract lines 1-24, col. 2 lines 61-62, col. 4 lines 62-66, col. 5 lines 3-12, col. 6 lines 44-51 and lines 64-67, col. 8 lines 18-22, col. 12 lines 27-39, and col. 13 lines 1-41);

(c) generating, based upon a prediction model and the separate values assigned to the predetermined set of criteria or predictors, risk subgroups (reads on "risk level") of the patient using health care resources at a predetermined level, such as cost, over a predetermined time interval or window (Fig. 6A-6B, Abstract lines 1-24, col. 1 lines 48-60, col. 2 lines 38-45 and lines 64-67, col. 3 lines 1-7, col. 3 lines 42-48, col. 4 line 65 to col. 5 line 3, col. 5 lines 13-25, col. 6 lines 44-63, col. 8 lines 33-35, col. 12 lines 7-18, col. 13 lines 51-60, and col. 18 lines 15-23 and lines 28-41);

(d) defining, based upon information, whether a first predictor is reflective of a correlation to a patient using health care resources at a predetermined level, such as cost, over a predetermined time interval or window (col. 2 lines 62-67, col. 3 lines 1-7 and 57-60, col. 4 lines 24-44, col. 4 lines 51-60, col. 5 lines 1-25, col. 6 lines 44-51, col. 7 lines 22-64, col. 9 lines 1-5, col. 12 lines 7-10, col. 14 lines 59-67, and col. 15 lines 1-54);

(e) assigning, based upon information, a first dichotomous value, such as "1", to the separate value for the first predictor in response to defining that the first predictor is an indicator of a high risk of a patient using health care resources at a predetermined level, such as cost, over a predetermined time interval or window (col. 2 lines 62-67, col. 3 lines 1-7 and 57-60, col. 4 lines 24-44, col. 4 lines 51-60, col. 5 lines 1-25, col. 6 lines 44-51, col. 7 lines 22-64, col. 9 lines 1-5, col. 12 lines 7-10, col. 13 lines 22-41, col. 14 lines 59-67, and col. 15 lines 1-54); and

(f) assigning, based upon information, a second dichotomous value, such as "0", to the separate value for the first predictor in response to defining that the first predictor is not an indicator of a high risk of a patient using health care resources at a predetermined level, such as cost, over a predetermined time interval or window (col. 2 lines 62-67, col. 3 lines 1-7 and 57-60, col. 4 lines 24-44, col. 4 lines 51-60, col. 5 lines 1-25, col. 6 lines 44-51, col. 7 lines 22-64, col. 9 lines 1-5, col. 12 lines 7-10, col. 13 lines 22-41, col. 14 lines 59-67, and col. 15 lines 1-54).

(B) As per claim 8, Wong discloses defining, based upon risk subgroups (reads on "risk level"), whether a high risk exists of the patient using healthcare resources at a predetermined level, such as cost, over a predetermined time interval or window (Abstract lines 1-24, col. 3 lines 42-48, col. 5 lines 1-25, col. 5 lines 31-40, col. 6 lines 44-51, and col. 13 lines 51-60), and defining, based upon information from a patient, a targeted intervention for a patient in response to defining that a high risk exists of the patient using healthcare resources at a predetermined level, such as cost, over a

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predetermined time interval or window (Abstract lines 1-24, col. 3 lines 42-48, col. 5 lines 1-25, col. 5 lines 31-65, col. 6 lines 44-51, col. 13 lines 51-60, and col. 15 lines 58-67).

(C) As per claim 9, Wong discloses generating, based upon separate values assigned to each predictor and a model generated using multiple logistic regression, a risk level of the patient using healthcare resources at a predetermined level, such as cost, over a predetermined time interval or window (Abstract lines 1-24, col. 3 lines 42-48, col. 5 lines 1-30, col. 5 lines 29-65, col. 6 lines 44-51, col. 12 lines 11-18, col. 13 lines 51-60, and col. 14 lines 49-58).

(D) As per claim 10, Wong discloses generating, based upon separate values assigned to the set of predictors and a model generated using multiple logistic regression, a probability or likelihood indicating the risk level of the patient using healthcare resources at a predetermined level, such as cost, over a predetermined time interval or window (Abstract lines 1-24, col. 3 lines 42-48, col. 5 lines 1-30, col. 5 lines 29-65, col. 6 lines 44-51, col. 12 lines 11-18, col. 13 lines 51-60, and col. 14 line 60 to col. 15 line 67).

(E) As per claims 22, Wong discloses:

(a) determining a resulting subset of variables from a set of variables or predictors best reflecting a correlation to patients who are at high risk for adverse health outcomes, consequently, resulting in substantial use of health care resources (e.g.,

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funds) (Fig. 1A-1B and 4, Abstract lines 1-24, col. 2 lines 38-61, col. 3 lines 58-67, col. 4 lines 24-34, col. 4 line 61 to col. 5 line 25, col. 5 line 66 to col. 6 line 16, col. 6 lines 44-51, col. 7 lines 12-21, col. 8 line 65 to col. 9 line 5, and col. 17 line 49 to col. 18 line 4); and

(b) defining points A, B, and C, wherein A represents the farthest past event, wherein B represents the present, wherein C can be defined by the last day for which an individual is still enrolled and eligible for benefits within a health plan, wherein $A < B < C$, and wherein the prediction of congestive heart failure hospitalization includes defining a time period between B and C such as 6 months used to predict CHF hospitalization within the next 6 months (col. 13 line 48 to col. 14 line 48). It is noted that the prediction time period of 6 months as discussed above in Wong is a "prospective time span."

The remainder of claims 21-23 repeat the same limitations as claim 1, and are therefore rejected for the same reasons given for those claims, and incorporated herein.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. (5,976,082) as applied to claim 1 above, and further in view of Mebane (5,486,999).

(A) As per claim 2, the relevant teachings of Wong are as discussed in the rejections above, and incorporated herein.

Wong fails to expressly disclose presenting an individual with a self assessment questionnaire designed to elicit information from an individual for a predetermined set of predictive factors. However, Wong includes receiving (reads on "collecting"), storing, and extracting information from a patient data record or file (reads on "individual") for a predetermined set of criteria or predictors (Fig. 1A-1B and 4, Abstract lines 1-24, col. 2 lines 49-61, col. 3 lines 58-67, col. 4 lines 24-34, col. 5 line 66 to col. 6 line 16, col. 6 lines 26-51, col. 7 lines 12-21, col. 8 lines 45-60, col. 12 line 46 to col. 13 line 17, and col. 17 line 49 to col. 18 line 4). Note, Wong receiving information in a patient file is considered to be a form of eliciting information from an individual.

Mebane discloses presenting a patient with a Lifestyle Questionnaire designed to determine selected lifestyle characteristics of the patient, wherein the questionnaire contains a set of input variables used to determine health care utilization (Fig. 4A, col. 2 lines 10-28, col. 5 lines 1-67, col. 6 Table 1, and col. 16 –18 Appendix A).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include the aforementioned component of Mebane within the method taught by Wong with the motivation of improving the quality of treatment and

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outcomes for patients and reducing the cost for health care services by analyzing information about a patient's medical history and record (Wong; col. 2 lines 38-45).

(B) As per claim 3, the relevant teachings of Wong are as discussed in the rejections above, and incorporated herein.

Wong discloses a predetermined set of criteria or predictors, wherein the predictors include past healthcare use factors, such as number of hospitalizations, emergency services, or physician office visits, demographic factors, such as gender or age, and disease factors, such as diabetes or congestive heart failure (Fig. 1A-1B and 4, Abstract lines 1-24, col. 2 lines 49-61, col. 3 lines 58-67, col. 4 lines 24-52, col. 5 lines 1-12, col. 5 line 66 to col. 6 line 16, col. 6 lines 26-67, col. 7 lines 12-21, col. 8 lines 45-60, col. 12 line 46 to col. 13 line 17, and col. 17 line 49 to col. 18 line 4).

In addition, insofar as Applicant recites "predetermined set of predictive factors consisting of..." it is irrelevant whether or not Wong and Mebane disclose every single statement recited in the claim.

The remainder of claim 3 repeats the same limitations as claim 2, and is therefore rejected for the same reasons given for claim 2, and incorporated herein. The motivation for combining Mebane with Wong is given above in claim 2, and incorporated herein.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. (5,976,082) as applied to claim 1 above, and further in view of Silver (6,269,339).

(A) As per claim 4, the relevant teachings of Wong are as discussed in the rejections above, and incorporated herein.

Wong discloses receiving (reads on "collecting"), storing, and extracting information from a patient data record or file (reads on "individual") for a predetermined set of criteria or predictors (Fig. 1A-1B and 4, Abstract lines 1-24, col. 2 lines 49-61, col. 3 lines 58-67, col. 4 lines 24-34, col. 5 line 66 to col. 6 line 16, col. 6 lines 26-51, col. 7 lines 12-21, col. 8 lines 45-60, col. 12 line 46 to col. 13 line 17, and col. 17 line 49 to col. 18 line 4).

Wong fails to expressly disclose presenting, to a web browser, a questionnaire that elicits information from an individual for a predetermined set of predictive factors, and receiving the information via a web browser in response to presenting the questionnaire.

Silver discloses presenting on a client computer system, over the Internet an interface for data input (reads on "web browser"), wherein the interface includes a questionnaire for inputting information from a patient for a set of relative risk factors (Fig. 3-6, col. 3 lines 25-48, col. 7 line 59 to col. 8 line 40, and col. 9 line 42 to col. 10 line 26), and receiving the information at a server over the Internet in response to presenting the questionnaire through an interface for data input (reads on "web browser") (Fig. 3-6, col. 3 lines 25-48, col. 7 line 59 to col. 8 line 40, and col. 9 line 42 to col. 10 line 26), wherein the client computer system and the server communicate using the NetBIOS protocol (col. 7-8).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include the aforementioned components of Silver within the method taught by Wong with the motivation of improving the quality of treatment and outcomes for patients and reducing the cost for health care services by analyzing information about a patient's medical history and record (Wong; col. 2 lines 38-45), and providing a convenient means and decreasing the time to submit, update, and access information (Silver; col. 3 lines 49-51, col. 4 lines 48-64, and col. 8 lines 15-40).

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. (5,976,082) as applied to claim 1.

(A) As per claim 7, the relevant teachings of Wong are as discussed in the rejections above, and incorporated herein.

Wong fails to expressly disclose determining whether each predictive factor of a set of predictive factors is indicative of a high risk of an individual utilizing healthcare services at a predetermined level within a prospective time span, assigning a first dichotomous value or a "1" to each separate value of each predictive factor of the set of predictive factors that is determined to be indicative of a high risk, and assigning a second dichotomous value or a "0" to each separate value of each predictive factor of the set of predictive factors that is determined to not be indicative of a high risk.

However, Wong discloses the following for a single predictor:

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(a) defining, based upon information, whether a first predictor is reflective of a correlation to a patient using health care resources at a predetermined level, such as cost, over a predetermined time interval or window (col. 2 lines 62-67, col. 3 lines 1-7 and 57-60, col. 4 lines 24-44, col. 4 lines 51-60, col. 5 lines 1-25, col. 6 lines 44-51, col. 7 lines 22-64, col. 9 lines 1-5, col. 12 lines 7-10, col. 14 lines 59-67, and col. 15 lines 1-54);

(b) assigning, based upon information, a first dichotomous value, such as "1", to the separate value for the first predictor in response to defining that the first predictor is an indicator of a high risk of a patient using health care resources at a predetermined level, such as cost, over a predetermined time interval or window (col. 2 lines 62-67, col. 3 lines 1-7 and 57-60, col. 4 lines 24-44, col. 4 lines 51-60, col. 5 lines 1-25, col. 6 lines 44-51, col. 7 lines 22-64, col. 9 lines 1-5, col. 12 lines 7-10, col. 13 lines 22-41, col. 14 lines 59-67, and col. 15 lines 1-54); and

(c) assigning, based upon information, a second dichotomous value, such as "0", to the separate value for the first predictor in response to defining that the first predictor is not an indicator of a high risk of a patient using health care resources at a predetermined level, such as cost, over a predetermined time interval or window (col. 2 lines 62-67, col. 3 lines 1-7 and 57-60, col. 4 lines 24-44, col. 4 lines 51-60, col. 5 lines 1-25, col. 6 lines 44-51, col. 7 lines 22-64, col. 9 lines 1-5, col. 12 lines 7-10, col. 13 lines 22-41, col. 14 lines 59-67, and col. 15 lines 1-54).

As per the recitation of additional or separate dichotomous values, the courts have broadly held that the duplication of parts is obvious. *In re Harza*, 274 F.2d 669,

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124 USPQ 378 (CCPA 1960). As such, these changes do not present a patentable distinction over the applied prior art of record.

(11) Response to Argument

In the Appeal Brief filed 12 January 2004, Appellant makes the following two arguments:

A. Claim 1 is patentable over Wong under 35 USC 102(e) for the following reasons:

i. Wong fails to teach the step of determining whether a certain predictive factor is itself indicative of a risk and the step of assigning a first or second dichotomous value to a predictive factor indicating that the information collected for the predictive factor is itself indicative of high or low risk.

ii. The Examiner indicated that Wong did not appear to teach the limitations of previously pending claim 5, which has now been included in claim 1, during a telephonic interview on 9 April 2003.

B. The addition of claim 22 did not add new matter.

The Examiner will address Appellant's arguments in sequence as they appear in the Appeal Brief.

Response to Argument (A)

Response to Argument (i)

In response to the Appellant's argument that certain features of claim 1 are not taught by Wong, the Examiner respectfully submits that Wong discloses the following method of identifying patients at high risk of adverse health outcomes (col. 1 lines 9-12, col. 2 lines 31-45, col. 3 lines 42-48, col. 5 lines 13-25 and 31-40, and col. 15 lines 58-67) which comprises:

(a) receiving (reads on "collecting"), storing, and extracting information from a patient record (reads on "individual") for a predetermined set of criteria or predictors (Fig. 1A-1B and 4, Abstract lines 1-24, col. 2 lines 49-61, col. 3 lines 58-67, col. 4 lines 24-34, col. 5 line 66 to col. 6 line 16, col. 6 lines 44-51, col. 7 lines 12-21, and col. 17 line 49 to col. 18 line 4);

(b) assigning, based upon information from a patient record, a separate value to each predictor of the set of predetermined criteria or predictors (Abstract lines 1-24, col. 2 lines 61-62, col. 4 lines 62-66, col. 5 lines 3-12, col. 6 lines 44-51 and lines 64-67, col. 8 lines 18-22, col. 12 lines 27-39, and col. 13 lines 1-41);

(c) generating, based upon a prediction model and the separate values assigned to the predetermined set of criteria or predictors, risk subgroups (reads on "risk level") of the patient using health care resources at a predetermined level, such as cost, over a predetermined time interval or window (Fig. 6A-6B, Abstract lines 1-24, col. 1 lines 48-60, col. 2 lines 38-45 and lines 64-67, col. 3 lines 1-7, col. 3 lines 42-48, col. 4 line 65 to

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col. 5 line 3, col. 5 lines 13-25, col. 6 lines 44-63, col. 8 lines 33-35, col. 12 lines 7-18, col. 13 lines 51-60, and col. 18 lines 15-23 and lines 28-41);

(d) defining, based upon information, whether a first predictor is reflective of a correlation to a patient using health care resources at a predetermined level, such as cost, over a predetermined time interval or window (col. 2 lines 62-67, col. 3 lines 1-7 and 57-60, col. 4 lines 24-44, col. 4 lines 51-60, col. 5 lines 1-25, col. 6 lines 44-51, col. 7 lines 22-64, col. 9 lines 1-5, col. 12 lines 7-10, col. 14 lines 59-67, and col. 15 lines 1-54);

(e) assigning, based upon information, a first dichotomous value, such as "1", to the separate value for the first predictor in response to defining that the first predictor is an indicator of a high risk of a patient using health care resources at a predetermined level, such as cost, over a predetermined time interval or window (col. 2 lines 62-67, col. 3 lines 1-7 and 57-60, col. 4 lines 24-44, col. 4 lines 51-60, col. 5 lines 1-25, col. 6 lines 44-51, col. 7 lines 22-64, col. 9 lines 1-5, col. 12 lines 7-10, col. 13 lines 22-41, col. 14 lines 59-67, and col. 15 lines 1-54); and

(f) assigning, based upon information, a second dichotomous value, such as "0", to the separate value for the first predictor in response to defining that the first predictor is not an indicator of a high risk of a patient using health care resources at a predetermined level, such as cost, over a predetermined time interval or window (col. 2 lines 62-67, col. 3 lines 1-7 and 57-60, col. 4 lines 24-44, col. 4 lines 51-60, col. 5 lines 1-25, col. 6 lines 44-51, col. 7 lines 22-64, col. 9 lines 1-5, col. 12 lines 7-10, col. 13 lines 22-41, col. 14 lines 59-67, and col. 15 lines 1-54).

Furthermore, the Examiner respectfully submits that Applicant is responsible for the full teachings of the reference. The Examiner points to the following passages below which were relied upon for further guidance regarding the interpretation of the Wong reference with regards to the steps of 1) determining whether a certain predictive factor is itself indicative of a risk and the step of 2) assigning a first or second dichotomous value to a predictive factor indicating that the information collected for the predictive factor is itself indicative of high or low risk as argued by the Appellant.

Firstly, Wong discloses at col. 4 line 61 to col. 5 line 25 and col. 12 lines 32-39 that "The selection of variables, both dependent and independent, for analysis is an important step impacting the accuracy of the final prediction model... With the analysis file in hand, a model or technique for identifying high risk subgroups is determined. That is, as represented by step 124, the analysis file is used to develop an identification technique represented by an equation incorporating a subset of the initial variables programmed into the above-mentioned processing step. The resulting subset are those variables which best reflect a correlation to adverse health outcomes consequently, resulting in substantial use of health care resources (e.g., funds)." It is the Examiner's position that Wong discloses Appellant's step within claim 1 of "determining, based upon said information, whether a first predictive factor is indicative of a high risk of said individual utilizing said healthcare services at said predetermined level within said prospective time span" based on the aforementioned passages of Wong.

Further, Appellant states that Wong takes many factors as shown by independent variables and inserts them into an algorithm without any analysis as to

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whether any of the independent variables themselves are indicative of a risk. However, the Examiner respectfully submits that the Appellant's statements are misdescriptive of the full teachings of Wong based on col. 4 line 61 to col. 5 line 25 and col. 12 lines 32-39 as discussed above. Clearly, Wong discloses "the analysis file is used to develop an identification technique represented by an equation incorporating a subset of the initial variables programmed into the above-mentioned processing step. The resulting subset are those variables which best reflect a correlation to adverse health outcomes consequently, resulting in substantial use of health care resources (e.g., funds)," and therefore, Wong discloses analysis of the variables to determine those variables which will indicate adverse health outcomes consequently, resulting in substantial use of health care resources (e.g., funds).

In addition, Appellant argues that claim 1 requires a determination of how a factor relates to healthcare use before using the factor as an input to the predictive model. In response, it is noted that the features upon which applicant relies (i.e., a determination of how a factor relates to healthcare use before using the factor as an input to the predictive model) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Secondly, in response to Appellant's arguments that Wong fails to teach the step of assigning a first or second dichotomous value to a predictive factor indicating that the information collected for the predictive factor is itself indicative of high or low risk, the Examiner notes Wong's teachings disclose using independent variable representing

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potential predictors of adverse health outcomes, wherein the independent variables of interest including assigning a yes or no (Y/N) to the following variables: ischemic heart disease, diabetes, adverse lifestyle diagnosis, cardiac dysrhythmias, other heart disease, and hypertensive disease (col. 12 line 26 to col. 13 line 18). The Examiner respectfully submits these independent variables are input into the prediction model (col. 17 line 49 to col. 18 line 23). However, it is noted these variables in the form of Y/N variables cannot be input into a model in this form as letters, and therefore would be entered into the model as a form of a value, such as a number (i.e., 0 or 1). Furthermore, with regards to the step of assigning a first or second dichotomous value to a predictive factor indicating that the information collected for the predictive factor is itself indicative of high or low risk, it appears to the Examiner that if a person answers Yes or No to the questions of adverse lifestyle diagnosis or diabetes, this is an indication of whether the question is indicative of a high or low risk of the patient utilizing healthcare services. A person who answers "Yes" to having diabetes would be at higher risk of using healthcare services as opposed to a person who answers "No" to the question of whether or not a person has diabetes. Thus, it is the position of the Examiner that Wong discloses assigning values to a predictive factor indicating that the information collected for the predictive factor is itself indicative of high or low risk, and therefore the rejection is maintained.

Furthermore, it is noted the specification provides no strict definition of the term "dichotomous value", nor was the Examiner able to find any specific portion of the specification providing a positive definition of the claimed "dichotomous value". It is also

noted that dependent claim 7 narrows independent claim 1 by further reciting that the "dichotomous values" are 0 or 1. Therefore, the Appellant's argument that discusses entering a "1" into the model is not a requirement for the dichotomous value of claim 1, which is broader than dependent claim 7. Thus, the Examiner has given the claim language the broadest interpretation and has applied art accordingly with regards to variables being a form of dichotomous value.

Response to Argument (ii)

In response to the Appellant's argument that the Examiner indicated that Wong did not appear to teach the limitations of previously pending claim 5, which has now been included in claim 1, during a telephonic interview on 9 April 2003, the Examiner respectfully submits that the Appellant's statements are misdescriptive of the Interview Summary of record (see Paper No. 7). After reviewing the Interview Summary (see Paper No. 7), the Examiner did not find any indication within the Interview Summary that the Examiners thought the limitations of claim 5 were not taught by the applied art. Rather, the Examiners agreed to reconsider the applied prior art in light of certain amendments to the claims, such as the inclusion of formulas recited in the specification at pp. 8 and 12 (see Paper No. 7).

Response to Argument (B)

In response to Appellant's argument that the addition of claim 22 did not add new matter, the Examiner respectfully submits that the Appellant has provided insufficient

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support for the newly added limitations within claim 22. Claim 22 recites the following:

"The method of claim 1, further comprising the step of:

defining a first reference date in the future; wherein the generating step includes generating said separate values assigned to said predetermined set of predictive factors, a risk level of said individual utilizing healthcare services at a predetermined level in the time period between a present date and the first reference date."

The Appellant provides the following citations (page 11, lines 11-12) as support for this newly added limitation within claim 22:

" 'Total encounters' over the subsequent six-month period was chosen as the dependent variable."


It is entirely unclear to the Examiner how the citations, namely page 11, lines 11-12, from the specification provide support for the entirety of claim 22. The citations do not recite "a risk level of said individual utilizing healthcare services at a predetermined level in the time period between a present date and the first reference date", only that the time period is a subsequent six-month period. Thus, the Examiner respectfully submits that claim 22 added new matter, and the rejection is maintained.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,


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